



Natural Resources
Canada

Ressources naturelles
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March 8, 2022

Nancy Covington, Charles King, Cathy Vakil
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Dear Drs. Nancy Covington, Charles King and Cathy Vakil:

The Honourable Steven Guilbeault, Minister of Environment and Climate Change Canada, has forwarded to the Honourable Jonathan Wilkinson, Minister of Natural Resources, a copy of your correspondence of December 1, 2021, about Small Modular Reactors (SMRs) and climate change. I am responding on behalf of Minister Wilkinson.

We recognize that we cannot lose focus and we cannot lose ground on the growing threat that climate change presents to the planet and to the health and livelihoods of all Canadians. That's why on December 11, 2020, the Government released *A Healthy Environment and a Healthy Economy* - the federal plan to build a better future with a healthier economy and environment. This is a plan that builds on the work done to date and efforts that are already underway, and continues down the path that Canadians, governments and businesses have been setting. It is a key pillar in our commitment to create over one million jobs, restoring employment to pre-pandemic levels – of which climate action and clean growth is a cornerstone.

The climate plan includes a wide array of measures and investments in renewable and next-generation technologies including technologies that will bring more clean, non-emitting power onto our grids, encourage cleaner modes of transportation such as zero-emission vehicles and transit, and make our homes and businesses more energy efficient.

Budget 2021, released on April 19, 2021, is a plan for a green recovery that fights climate change. It helps more than 200,000 Canadians make their homes greener, builds a net-zero economy by investing in world-leading technologies that make industry cleaner and reduces pollution, helps Canada reach its goal of conserving 25 per cent of our lands and oceans by 2025, and creates good middle-class jobs in the green economy along the way.

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As part of the plan, the Government of Canada is also working closely with partners to advance the safe development of SMR technology. Canada has a long history of safe and responsible development of nuclear energy. Nuclear energy currently plays an important role in Canada's current energy mix, accounting for 15% of our current supply of electricity, including approximately 60% of our supply in Ontario and approximately 40% in New Brunswick. The sector also contributes approximately \$17 billion a year to Canada's gross domestic product, and accounts for approximately 76,000 jobs across the country, including over 200 small- and medium-sized enterprises.

SMRs represent a new field of innovation and a potential tool to reduce emissions and create jobs and economic growth. Several provincial governments including New Brunswick, Ontario, Alberta and Saskatchewan, as well as Indigenous communities and organizations, have expressed a clear interest in using SMR technologies to reduce their greenhouse gas emissions, decarbonize heavy industry and spur economic development. The Government of Canada is working closely with these partners, and with like-minded countries such as the United States and the United Kingdom, to capitalize on this important opportunity for Canada. In December 2020, the Government launched Canada's *SMR Action Plan*, which outlines a series of concrete actions that over 100 partners are taking to advance the development of SMR technologies.

On the topic of nuclear waste, protecting the health, safety, and security of Canadians and the environment is the Government's top priority when it comes to regulating nuclear energy and materials. The Government of Canada is dedicated to ensuring that safe solutions are in place for managing radioactive waste now and into the future. Currently, all radioactive waste in Canada is safely managed in accordance with international standards at facilities licensed by the Canadian Nuclear Safety Commission (CNSC), Canada's independent nuclear regulator.

The Government of Canada is committed to continuous improvement with respect to ensuring that safe solutions are in place for managing radioactive waste. For this reason, Canada launched an engagement process to modernize Canada's radioactive waste policy. From November 2020 to May 2021, the Government of Canada met with and received written feedback from Indigenous peoples and interested Canadians on how they would like to see our radioactive waste policy modernized. After taking into account the views of participants in the process, and considering international standards based on the best available science, on February 1, 2022 NRCan released a draft Policy for Radioactive Waste Management and Decommissioning for public comment until April 2, 2022. For more information on this important initiative please visit the [Modernizing Canada's Radioactive Waste Policy](http://radwastereview.ca) virtual hub (<http://radwastereview.ca>).



- 3 -

As you note in your letter, some SMR designs, including Moltex's, propose to use recycled CANDU reactor fuel. While the technology itself is still under development, the Moltex process aims to investigate the possibility of extracting various fission products from used CANDU fuel, which is fabricated from natural uranium. The Government of Canada investment in this technology is important because research done to date indicates that this technology represents a potential path forward for recycling used CANDU fuel. If this technology proves viable, it would allow Canada to further extract energy from a used resource, potentially providing Canadians with emissions free energy for years to come while reducing long-lived radioactive waste. This investment will support Moltex in its research and development and testing their innovative technology.

Canada remains committed to the Treaty on the Non-Proliferation of Nuclear Weapons, including the full implementation of safeguards set by the International Atomic Energy Agency to provide assurances that nuclear materials are used solely for peaceful purposes in Canada.

Thank you for sharing your views on this new technology. The pathway to net zero by 2050 is the challenge of our time. To be successful, we must consider all potential options and solutions emerging from across the different energy sectors and we appreciate hearing the perspectives of all Canadians on this important issue

Yours sincerely,

Mollie Johnson
(she/her/elle)
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Energy Systems Sector
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